

Westfield Public Works Department Requires As-Built Submittals

Digital As-Built Submittal Requirements

1.0 General

- **1.1.** The requirements of this section apply to all subsequent sections.
- **1.2.** Files must be saved and submitted on a CD-ROM in a jewel case without using file compression.
- 1.3. The CD label shall include the following:
 - 1.3.1. Engineering Company Name with prepared by statement
 - 1.3.2. Project Name
 - 1.3.3. Date that data is burnt onto CD
 - 1.3.4. Designate CD as As-Built, Construction Plan or Other
- **1.4.** Files must be submitted in DWG format.
- **1.5.** Each file should be for one section of development. Multiple sections will not be accepted in one file and care must be taken to clearly mark existing infrastructure facilities.
- **1.6.** If multiple sections of a project are being submitted, files shall be placed in separate directories on the CD.
- **1.7.** File names should make sense to a viewer who may not be familiar with the consulting firms naming conventions and be indicative of the contents of the file.
- **1.8.** All pertinent drawing elements will reside in the primary drawing file. There shall be no cells, nodes, blocks, or reference files (x-refs) attached to the drawing.
- **1.9.** Separate layers for structures, pipes, annotation etc. with a logical description for each layer.
- **1.10.** Projection shall be referenced to NAD83, Indiana State Plane Coordinate System, East Zone, using U.S. Survey Feet and per the Hamilton County datum. Elevations shall be in the NAVD 88 vertical datum. The coordinate location of

- the items listed below shall be obtained by a field survey and with vertical data that meets survey grade accuracy.
- 1.11. Tie into section corners in the Indiana State Plane Coordinate System to insure proper orientation. Section corner tie sheets can be obtained from the Hamilton County Surveyor's web page.
- **1.12.** All easements shall be represented and drawn as closed polylines representing aggregate areas.
- **1.13.** Must have graphical representation of all off-site platted easements, right-of-ways, lot lines, etc. encompassing infrastructure improvements.
- **1.14.** Open Ditches will be As-Built and have the following items:
 - 1.14.1 Open Ditch showing: flow line, toe of slope, top of bank, and sediment basins
 - 1.14.2 Cross sections taken a minimum of every 100ft and at any significant bend
 - 1.14.3 Outlet pipes into open ditch showing: size, material and invert
 - 1.14.4 Surface Pipes showing: size, material, and invert.
 - 1.14.5 Special Structures showing: size, material, and invert.
 - 1.14.6 Tributaries: shown 100 feet upstream and its cross section
 - 1.14.7 Filter Strips and their width
 - 1.14.8 Utilities (pipe lines, gas lines, sewer lines etc.)
 - 1.14.9 Easements (See Section 1.12 & 1.13)

2.0 As-Built - Infrastructure

- **2.1.** An Excel spreadsheet populated with As-Built data following the layout standard provided.
- **2.2.** All Storm water Structure BMP's must be listed in the Excel spreadsheet with their corresponding Structures. Those that

- do not have structures associations must be listed on the spreadsheet as well with their associated location.
- **2.3.** Object Data Table template will be provided and will be populated with As-Built data.
- **2.4.** All Stormwater Structure BMP's must be listed in the Object Data Table.
- **2.5.** The digital construction file must be revised to show the exact As-Built location of the following items:
 - 2.5.1. Storm water manholes, Inlets, End Sections, Risers, Pipes
 - 2.5.2. Detention-Retention Ponds with Normal Pool Elevation & Top of Bank drawn as a closed polylines.
 - 2.5.3. Sub-Surface Drains street and laterals (street SSD drains must end into the Storm Structure Block insertion point.)
 - 2.5.4. Flow line of swales and ditches with a bottom width of 1 foot or greater.
 - 2.5.5. Sanitary sewer manholes, sewer mains, lift stations, force mains, wyes, laterals
 - 2.5.6. Air/vacuum relief manholes
 - 2.5.7. Lateral markers
 - 2.5.8. End of stubs
 - 2.5.9. Hand holes and pavement loops
 - 2.5.10. Pipe casing
 - 2.5.11. Water Main lines, laterals constructed, hydrants, reducers, sleeves, tees, crosses, saddles and valves
- **2.6.** The As-Built location of the sewer wyes shall be located on the plans as measurement along the pipe centerline from the nearest downstream manhole.
- **2.7.** Sub-surface drain lateral locations should be located with a proper distance from the nearest structure or property line.

- **2.8.** All storm water and sanitary structures will have top of castings and invert elevations. Design Values for all infrastructure shall be the As-Built values and any construction values will be crossed out with the construction data still legible.
- **2.9.** Structures will be cells or blocks and have an appropriate Structure ID using the same attribute field name. i.e. STR_NU
- **2.10.** All Infrastructure pipes will have a length, pipe size (in inches) and material listed.
- **2.11.** Infrastructure line work must be continuous polylines with a beginning and ending at a structure insertion point, connecting only two structures per line. Lines must be drawn with the direction of flow.
- **2.12.** PDF of the signed paper As-Built documents. It must be legible, contain all As-Built data including the profile sheets, and be reproducible to scale. The files must be a minimum of 300 dpi, rotated properly, and be stored in a separate folder on the CD.
- **2.13.** The following information shall be provided for the Sanitary Laterals: Lot Number, Address, Type, Main ID, Dist Back to structure, Pipe Length, Diameter, Material and the connection type.

3.0 Secondary Plats

- **3.1.** Layers that need to be included in the file must include but not limited to:
 - 3.1.1. Lot Dimensions
 - 3.1.2. Lot Numbers
 - 3.1.3. Parcel Lines
 - 3.1.4. Perimeter Boundary Lines
 - 3.1.5. Right of Way Lines

- 3.1.6. Curve Data & Line Table
- 3.1.7. Easements
- 3.1.8. Road Center Lines
- 3.1.9. Lots Square Feet
- 3.1.10. Street Names
- 3.1.11. Monumentation
- **3.2.** The digital file that is sent needs to match exactly the plat that is submitted for recording.
- **3.3.** Monuments in and on perimeter of the development must be set in accordance with Indiana Administrative Code 865 IAC 1-12-18.
- **3.4.** A PDF file of the recorded Plat with the recording stamp.

Please send all Submittals with a transmittal letter to:

Leane Welsh Westfield Public Works Department 2706 E. 171st St. Westfield, IN 46074